

STUDIES IN THE EUPATORIEAE (ASTERACEAE) CIX.

A NEW GENUS, ACRITOPAPPUS.

R. M. King and H. Robinson  
Smithsonian Institution, Washington, D.C. 20560.

A group of three gyptoid species from eastern Brazil having a distinctive reduced pappus is described here as a new genus. Two of the species were originally placed together in the genus Decachaeta to which they had no close relationship. The form of the pappus, though very similar in both species, was described by Gardner as "coroniformi 5-dentata" in D. longifolia and "5-10-setoso, setis glabris valde inaequalibus" in D. conferta. Subsequent transfer of the species to Ageratum (Baker, 1876) and final separation by B. L. Robinson (1913) seems to have been mostly based on the slight differences in the pappus. It was amazing that after so much damaging overuse of the pappus as a character, that one of the species was ultimately placed in a genus to which it could not belong even by definition, Alomia. The second species was left without definite generic placement by B. L. Robinson (1913). A third species is newly described here.

The three species placed here in Acritopappus actually have most characters in common including the narrowly petiolate narrowly acuminate leaves with weakly pinnate and closely reticulate venation, the plane receptacle, the identical corolla, stamen and style structure, and the few very short smooth pappus setae. The genus Ageratum with which the species of Acritopappus have been associated, differs most prominently by having a conical receptacle and glandular punctate leaves. The genera Decachaeta and Alomia as redefined are strictly Mexican and Central American and belong to other series, Critonioid and Brickellioid respectively.

Acritopappus R.M.King & H.Robinson, genus novum  
Asteracearum (Eupatorieae). Frutices erecti paucae  
ramosi. Caules teretes vel sexangulati glabri. Folia  
plerumque opposita petiolata, petiolis angustis,  
laminis lanceolatis base acutis apice acuminatis vel  
acuminatissimis margine serratis vel subserrulatis  
supra et subtus glabris, nervis secundaris pinnatis,  
nervulis prominulis dense reticulatis. Inflorescentiae

axillares vel terminales, ramis dense corymbosis, pedicellis hirtellis. Involucris squamae 6-15 imbricatae 3-seriatae inaequilongae oblongae apice obtusae vel breviter acutae extus glabrae; receptacula plana vel concava, paleis linearibus. Flores 6-30 in capitulo; corollae anguste infundibulares extus glanduliferae, lobis brevibus vix longioribus quam latioribus; filamenta antherarum in parte inferiore breviora in parte superiore breviora, cellulis superioribus subquadratis sensim longioribus, parietibus distincte varie annulate ornatis, cellulis exothecialibus subquadratis vel brevioribus, appendicibus distincte longioribus quam latioribus; styli inferne glabri non nodulosi; appendicibus linearibus dense breviter papillosis; achaenia prismatica 5-costata glabra; carpodia breviter distincte contorta, cellulis breviter oblongis, parietibus dense minute nodulosis; pappi vestigiales breviter coroniformes vel paucae setiferi, setis brevibus laevibus.

Species typica: Decachaeta longifolia Gardn.

The three species of the genus can be distinguished by the following key.

1. Bases of leaf blades rounded; heads 7-9 mm high with ca. 15 phyllaries and 25-30 flowers. A. irwinii
1. Bases of leaf blades acute; heads ca. 0.5 mm high with 6-10 phyllaries and 6-15 flowers. 2
  2. Phyllaries obtusely acute with indurate tips; pappus of isolated short setae; leaf tips narrowly acuminate. A. confertus
  2. Phyllaries with rounded or truncate rather scarious tips; pappus with coroniform rim between setae; leaf tips very long and nearly filiform. A. longifolius

Acritopappus confertus (Gardn.) R.M.King & H.Robinson, comb. nov. Decachaeta conferta Gardn. in London J. Bot. 5: 463. 1846. Brazil.

Acritopappus irwinii R.M.King & H.Robinson, sp. nov. Frutices 2.5 cm alti paucae ramosi. Caules, rami et folia glabra. Folia pendentia aliquantum viscosa,

petiolis 0.5-2.0 cm longis angustis, laminis ovato-lanceolatis 5-12 cm longis 1-4 cm latis apice peranguste acuminatis base rotundatis margine crenato-serratis vel serrulatis. Capitula 7-9 mm alta; involucri squamae ca. 15 imbricatae 2-3-seriatae subaequilongae oblongae 1.5-3.5 mm longae 1.0-1.5 mm latae apice rotundatae scariosae extus glabrae. Flores 25-30 in capitulo; corollae 4.5-5.0 mm longae; appendices stylorum valde papillosae; achaenia 2.0-2.5 mm longa angusta; pappi breviter setiformis, setis 0-5. Grana pollinis ca. 25 $\mu$  diam.

Type: BRAZIL: Minas Gerais: Serra do Espinhaço: DENSE cerrado on red clay, hilltop ca. 15 km west of Grão Mogol, road to Cristália. Elevation 950 m. 20 February 1969. Irwin, Reis dos Santos, Souza, & da Fonseca 23621 (Holotype US!). Additional specimen BRAZIL: Minas Gerais: Serra do Espinhaço. Sandy slopes with sandstone outcrops and adjacent rocky river margin, Rio Itacambiruçu, ca. 15 km north of Grão Mogol. Elevation 950 m. 18 February 1969, Irwin, Reis dos Santos, Souza, & da Fonseca 23520 (Paratype US!).

The new species is most obviously distinct in the rounded bases of the leaf blades and the larger heads but the style branches also have longer more pointed papillae than those of the other species and the achenes are more elongate. The new species occurs in an area about 150 miles north of the known distribution of A. longifolia on a separate but adjacent mountain range. The available specimens indicate differing preferences in elevation, A. irwinii being found at 950 m and A. longifolia at 1200-1275 m.

Acritopappus longifolius (Gardn.) R.M.King & H.Robinson, comb. nov. Decachaela longifolia Gardn. in London J. Bot. 5: 462. 1846. Brazil.

#### References

- Baker, J.G. 1876. Compositae. II. Eupatoriaceae in Martius, Flora Brasiliensis. 6(2): 182-398. pl. 51-102.
- Robinson, B.L. 1913. A generic key to the Compositae-Eupatorieae. Contr. Gray Herb. 42: 429-437.